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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/690,313

10/17/2000

James L. Keesey

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EXAMINER

HAN, QI

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

08/08/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/690,313	<b>Applicant(s)</b> KEESEY ET AL.	
	<b>Examiner</b> QI HAN	<b>Art Unit</b> 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-16,18-29 and 31-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-16,18-29 and 31-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/01/2008</u>  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114

#### ***Information Disclosure Statement***

3. The references listed in the Information Disclosure Statement submitted on 05/01/2008 have been considered by the examiner (see attached PTO-1449).

#### ***Response to Amendment***

4. This communication is responsive to the applicant's amendment and RCE both filed on 05/01/2008. The applicant amended claims 1, 14 and 27 (see the amendment: page 2-6).

***Response to Arguments***

5. Applicant's arguments filed on 05/01/2008 with respect to the claim rejection under 35 USC 103, have been fully considered but are moot in view of the new ground(s) of rejection, since the newly amended claims introduce new issue, which change the scope of the claims. It is also noted that the previous cited references are still applicable to the amended claims for prior art rejection based on the new ground (see detail below).

In response to applicant's arguments with respect to claim 1 (also related to claims 14 and 27) that "there is no teaching or suggestion in D'hoore that the voice print is used to translate voice data into text", "D'hoore appears to use the voice prints in order to obtain the proper enunciations or pronunciations of the words in the specific language of the user", and "D'hoore does not use the voice print to translate voice data to text as required by the claims" (Remarks: page 4, paragraphs 2-3), the examiner respectfully disagrees with applicant's arguments and has a different view of prior art teachings and claim interpretations.

Firstly, the applicant's arguments (Remarks: page 4, paragraphs 2-3) appear to suggest that the speech recognition does not convert (translate) speech (voice data) into text (symbols) only because D'hoore does not expressly use the words "translate" and "text". However, this is not persuasive because one of ordinary skill in the art would have recognized that these words could be replaced by other equivalent words, such as convert/recognize/map/match and symbol/words/written-string, and converting speech into text (speech-to-text) would be an implicit/necessary functionality of speech recognition, in nature. It is noted that, D'hoore indeed uses the equivalent (or alternative) words to teach that 'speech recognition system is restricted to

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mapping (translating) the speech onto language specific symbols (text)' (D'hoore: col. 7, lines 36-38). D'hoore also teaches that 'the system will automatically construct the best possible phoneme or model unit sequence to describe the word (text), based on the phoneme model database and the uttered speech', 'this sequence is referred to as a voice print' that 'can be used to recognize utterances of the trained word by the speaker', and 'it can **also** be used to check or detect the identity of the speaker' (D'hoore: col. 7, lines 32-55). One of ordinary skill in the art would have readily recognized that D'hoore's disclosure teaches the two different features: speech recognition that maps speech to text (symbols) and speaker identification (or verification) that identifies a targeted speaker, both using voice print.

Secondly, it is noted that the rejection for the corresponding claim(s) is based on the teachings of the combined references (i.e. Hedin in view of King and D'hoore), wherein Hedin clearly teaches the speech recognition (ASR) converting (translating) speech to text (Hedin: col. 5, lines 20-22 and col. 6, lines 6-7) and D'hoore teaches clearly teaches the speech recognition using voice print (D'hoore: col. 1, line 36 to col. 2, line 4 and col. 7, line 32 to col. 8, line 12). The rejection further clearly addressed and analyzed the proper motivation/obviousness for combining the references (see detail in the corresponding rejection). These further supports the examiner's rejection stated above. Therefore, applicant's arguments against the references individually (see Remarks: page 4 paragraphs 2-3) is not proper, because one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

***Claim Rejections - 35 USC § 103***

6. Claims 1-3, 5-16, 18-29, 31-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over HEDIN et al. (US 6,185,535 B1) hereinafter referenced as HEDIN in view of KING (US 6,532,446 B1) and D'HOORE et al. (US 6,085,160) hereinafter referenced as D'HOORE.

Regarding **claim 14**, HEDIN discloses 'voice control of a user interface to service applications' (title), comprising:

"a device for receiving and transmitting data" (Fig. 1a and col. 4, lines 25, 'the client part 101 (corresponding to device) receives speech (data) from user', 'those words (data) ...sent (transmit) to the server part 103');

"a computer having a data store coupled thereto, wherein the data store stores data, connected to the device" (Fig. 1 and col. 4, lines 46-50, 'the server (a computer) part 103 is implemented in a separated processor (computer)' that 'is more powerful (e.g., faster, more storage space (data store), etc.)', 'the first digital link 105 for coupling (connecting) the client and server part 101, 103 may be wireless or wireline'); and

"one or more computer programs, performed by the computer" (col. 6, lines 31-35, 'various embodiments may utilize one or more programmable elements (computer programs) executing a stored program to perform a number of functions') for:

"receiving voice data and a device identifier from the device" (col. 5, lines 20-22, 'the server...uses its own, more powerful ASR to analyze the received speech (voice data)'; col. 4, lines 62-63, 'through WAP URL (interpreted as device identifier', wherein WAP also inherently includes device identifier(s) for both sides of communication; also see col. 1, lines 21-34);

“translating the voice data to text”, (col. 5, lines 20-22, ‘the server...uses its own, more powerful ASR (speech-to-text) to analyze the received speech (voice data); col. 6, lines 6-7, ‘the spoken text will either be recognized and converted (translated) to text by the ASR in the client 101, or alternatively by the ASR in the gateway/proxy part 107 (replacing server part 103)’);

“determining whether to filter the translated text” and “if it is determined that the translated text is to be filtered, applying a filter to the translated text”, (col. 5, lines 43-55 ‘when the data formats are different’ determining ‘to convert (filter) the data from one format to the other’ (wherein converting formats is interpreted as filtering, in light of specification: see page 6, lines 16-20), ‘conversion ...not only substituting (formatting) keywords from one format to another (e.g. from HTML (text) to WML), but also some level of filtering to weed out data that cannot be received by the terminal...’).

HEDIN does not expressly disclose “the translated text is returned to the device.”

However, the feature is well known in the art as evidenced by KING who discloses ‘server based speech recognition user interface for wireless devices’ (title), and teaches that ‘the symbolic data file (corresponding to translated text) is then sent back to the originating mobile device’ (col. 3, lines 16-19) and ‘the processed symbolic data file...may be reformatted (filtered) ...then sent to the requesting mobile device or to a designated third party device’ (col. 10, lines 32-48).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify HEDIN by providing sending the recognized/converted/reformatted symbolic data (text) back to the originating device (or a designated third party device), as taught

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by KING, for the purpose (motivation) of improving the usability and commercial viability of network for using speech recognition services (KING: col. 2, lines 37-43).

Further, it is noted that HEDIN in view of KING does not expressly disclose "the voice data is translated to text **using a voice print**" that "is retrieved from datastore based on the device identifier". However, the feature using voice print for speech recognition is well known in the art as evidenced by D'HOORE who discloses 'language independent speech recognition' (title), and teaches that 'the words in the vocabulary of recognizable word may be described by a voice print...' (col. 2, lines 1-5), 'speaker dependent training of words, try to find the best possible phonetic representation for a particular word based on a few utterances of that word(s) by the user', 'speech recognition system...mapping (translating) the speech onto language specific symbols (text)' and 'these voice prints can be used to recognize utterances of the trained word by the speaker' (col. 7, lines 32-55). Further, as stated above, since HEDIN discloses that 'in a multi-user environment, each user's profile must be stored (datastore)' (col. 1, lines 66-67; also col. 8, lines 56-58) and using WAP URL (device identifier) (col. 4, lines 62-63), and D'HOORE discloses speech recognition and speaker identification using voice prints (col. 7, lines 45-55), one of ordinary skill in the art would have recognized that voice print would be readily and properly stored in the corresponding user profile using WAP URL (as device identifier) for future retrieving and the storing/retrieving result would be predicable for the ordinary skill person, because voice print is user specific information and user profile is most suitable place to keep user specific information. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teachings of HEDIN in view of KING and D'HOORE by providing speech recognition (voice translation) using voice



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prints and storing the voice prints in the corresponding user profile using WAP URL (as device identifier) for retrieving, for the purpose (motivation) of trying to find the best possible phonetic representation based on user-uttered words (text) and/or better matching the speech of the targeted speaker for speech recognition (D'HOORE: col. 7, lines 34-53).

Regarding **claim 15** (depending on claim 14), HEDIN in view of KING and D'HOORE further discloses "storing a user profile in a data store connected to the computer", (HEDIN: col. 1, lines 66-67, 'in a multi-user environment, each user's profile must be stored'; col. 8, lines 56-58, 'the RAP server 205' 'may be implemented as a multi-user, central WAP application server').

Regarding **claim 16** (depending on claim 15), HEDIN in view of KING and D'HOORE further discloses "user profile comprises a voice print" (HEDIN: col. 1, lines 66-67, 'each user's profile must be stored'; D'HOORE: col. 7, lines 45-55, 'voice prints... can also be used to check or detect the identity of the speaker'; so that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify HEDIN in view of KING and D'HOORE by providing a voice print in a user profile, because voice print is user specific information and user profile is most suitable place to keep user specific information).

Regarding **claim 18** (depending on claim 14), HEDIN in view of KING and D'HOORE further discloses "determining comprises extracting one or more key words from the translated text", (HEDIN: col. 5, lines 45-55 'conversion ...not only substituting keywords from one format to another (e.g. from HTML (text) to WML), but also some level of filtering to weed out data that cannot be received by the terminal'; HEDIN: col. 5, lines 24-28, 'the recognized speech (the translated text) may consist of commands (keywords) for controlling the server application, in

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which case the command are acted upon' (implying the command is extracted); HEDIN: col. 9, lines 59-67, 'if the ASR 307 looks for...the phrase “\*CALL\*”, then the ASR 107 will detect (corresponding to extract) that the unrecognized isolated word consists of the word “CALL” with another unrecognized part following it’).

Regarding **claim 19** (depending on claim 18), HEDIN in view of KING and D’HOORE further discloses “a filter is selected based on one or more extracted key words” (HEDIN: col. 5, lines 43-55, ‘conversion ...not only substituting (formatting) keywords from one format to another (e.g. from HTML (text) to WML), but also some level of filtering to weed out data that cannot be received by the terminal...’; col. 15, lines 59-66, the devices used for the applications can be ‘a WAP-enabled phone’, ‘electronic notepads’, or ‘windows-based’ ‘computer’; col. 5, lines 24-26, ‘the recognized speech (text) may consist of commands (extracted keywords) for controlling server application’; col. 9, lines 55-67, ‘TP (terminal part) command words (extracted keywords, such as “CALL”)’; col. 5, lines 59-66, different ‘services’ and/or ‘applications’ that request displaying menus; it would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize that the recognized commands (keywords) could be associated with different devices or applications that have different textual display formats, such as menus, so as to combine the different teachings of HEDIN together by providing different text formats for different devices and/or applications based on the recognized commands (keywords), for the purpose (motivation) of providing enhanced and extended services/applications in advanced mobile networks for the user (HEDIN: col.4, lines 63-65)).

Regarding **claim 20** (depending on claim 14), HEDIN in view of KING and D’HOORE further discloses “applying the filter comprises formatting the translated text”, (HEDIN: col. 5,

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lines 45-55 ‘when the data formats are different... convert (filter) the data (translated text) from one format to the other’, ‘conversion ...not only substituting (formatting) keywords from one format to another (e.g. from HTML (text) to WML), but also some level of filtering to weed out data that cannot be received by the terminal...’).

Regarding **claim 21**(depending on claim 20), HEDIN in view of KING and D’HOORE discloses “formatting the translated text for an application”, (HEDIN: col. 5, lines 50-55, ‘if the server 109 is an application that is accessible via the Internet...pass on to the client 101 only that data (text data) that is appropriate’; col. 14,10-21, ‘weather information service’ (application); col. 15, lines 55-67; interactive voice controlled services (applications)’).

Regarding **claim 22** (depending on claim 20), HEDIN in view of KING and D’HOORE further discloses “formatting the translated text for the device”, (HEDIN: col. 15, lines 62-63, ‘voice-enabled special devices, such as electronic notepads’).

Regarding **claims 23-24 and 26** (depending on claim 14), the rejection is based on the same reason described for claim 14, because it also reads on the limitations of claims 23-24 and 26 respectively.

Regarding **claim 25** (depending on claim 24), HEDIN in view of KING and D’HOORE further discloses “returning the filtered text via an electronic mail message”, (KING: col. 2, lines 63-64, ‘email’).

Regarding **claims 1-3 and 5-13**, they recite a method. The rejection is based on the same reason described for claims 14-16 and 18-26 respectively, because the method claims and apparatus claims are related as apparatus and method of using same, with each claimed element's function corresponding to the claimed method step.

Regarding **claims 27-29 and 31-39**, they recite an article of manufacture. The rejection is based on the same reason described for claims 14-16 and 18-26 respectively, because the article claims and apparatus claims are related as apparatus and article of using same, with each claimed element's function corresponding to the claimed article element's function.

Regarding **claim 40** (depending on claim 1), HEDIN in view of KING and D'HOORE further discloses "the device identifier comprises a unit identifier which identifies a particular device operated by a user" (KING: col. 6, line 41-42, 'the contact information ...(e.g. a phone number or a uniform resource indicator (URI), which is read on unit identifier) may be embedded in software loaded on the mobile device'; col. 9, lines 53-58, 'each of the mobile devices serviced by link server device is assigned an identification (ID) or device (ID)' (read on unit identifier) and 'a device ID can be a phone number of the device or an IP address or a combination of an IP address and a port number', it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teachings of HEDIN, KING and D'HOORE by providing an ID for each device, such as using a phone number, IP address, or URI for each of mobile devices, taught by KING, for the purpose (motivation) of identifying mobile device to outside entities and corresponding the device with associated user account (KING: col. 8, lines 38-43)).

### ***Conclusion***

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qi Han whose telephone numbers is (571) 272-7604. The examiner can normally be reached on Monday through Thursday from 9:00 a.m. to 7:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil, can be reached on (571) 272-7602.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Inquiries regarding the status of submissions relating to an application or questions on the Private PAIR system should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at: [ebc@uspto.gov](mailto:ebc@uspto.gov). For general information about the PAIR system, see <http://pair-direct.uspto.gov>.

QH/qh

August 5, 2008

/Qi Han/

Examiner, Art Unit 2626